Appl. No. 09/746,854
Amdt. dated May 23, 2007
Reply to Office Action of March 30, 2007

Docket No. 83336.0476

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Previously presented) A generic device controller unit system for facilitating interaction between a processor of a non-true real time computer and any number of peripheral devices, the system comprising:

        a general purpose device controller employing asynchronous true real time peripheral device control, wherein the device controller interfaces between the peripheral devices and the non-true real time computer having a non-true real time operating system and a non-true real time-enabled circuit board, thereby allowing a non-true real time operating system to implement true real time control of the peripheral devices; and

        a data and protocol communications interface, wherein the communications interface connects the processor and the peripheral devices, thereby allowing the processor to utilize a single protocol and associated data to communicate with the peripheral devices which may be utilizing protocols and associated data which are different than that used by the processor.

2.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control while interfaced with a non-true real time operating system running standard non-true real time software.

3.   (Original)   The system of Claim 1, wherein the generic device controller unit system functions as a distributed processing environment.

4.   (Original)   The system of Claim 1, wherein the generic device controller unit system further includes customized system drivers.

5.   (Original)   The system of Claim 1, wherein Universal Serial Bus is the default communication protocol between the generic device controller unit system and the processor.

6.   (Original)   The system of Claim 2, wherein the generic device controller unit system interfaces with the non-true real time operating system that functions in a Win32 environment.

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7.   (Original)   The system of Claim 1, wherein the generic device controller unit system is an input/output device interface for a processor to peripheral devices.

8.   (Original)   The system of Claim 1, wherein the generic device controller unit system provides real time device control to resource management capabilities of a standard non-true real time operating system.

9.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control without the higher level functionality of the processor.

10.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control without the processor using a true real time kernel.

11.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control without the processor utilizing a layered true real time operating system.

12.   (Previously presented) A generic device controller unit system for facilitating interaction between a processor of a non-true real time computer and any number of peripheral devices, the system comprising:

a general purpose device controller employing asynchronous true real time peripheral device control, wherein the device controller interfaces between the peripheral devices and the non-true real time computer having a non-true real time operating system and a non-true real time-enabled circuit board, thereby allowing a non-true real time operating system to implement true real time control of the peripheral devices without the processor requiring either a real time kernel or a layered true real time operating system.

13.   (Original)   The system of Claim 12, wherein the generic device controller unit system produces true real time peripheral device control while interfaced with a non-true real time operating system running standard non-true real time software.

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14.   (Original)   The system of Claim 12, wherein the generic device controller unit system functions as a distributed processing environment.

15.   (Original)   The system of Claim 12, wherein the generic device controller unit system is an input/output device interface for the processor to the peripheral devices.

16.   (Original)   The system of Claim 12, wherein the generic device controller unit system provides real time device control to resource management capabilities of a standard non-true real time operating system.

17.   (Original)   The system of Claim 12, wherein the generic device controller unit system produces true real time peripheral device control without the higher level functionality of the processor.

18.   (Original)   The system of Claim 12, wherein the generic device controller unit system interfaces with the non-true real time operating system that functions in a Win32 environment.

19.   (Previously presented)   A generic device controller unit system for providing a data and protocol communications interface which facilitates interaction between a processor of a non-true real time computer and any number of peripheral devices, the system comprising:

an asynchronous general device data and protocol communications interface, wherein the communications interface connects the processor and said any number of peripheral devices, thereby allowing the processor to utilize a single protocol and associated data to communicate with the various peripheral devices which may utilize different protocols and associated data than that used by the processor, and

wherein the communications interface employs asynchronous true real time peripheral device control, and wherein the communications interface connects the peripheral devices and the non-true real time computer having a non-true real time operating system and a non-true real time-enabled circuit board.

20.   (Original)   The system of Claim 19, wherein the generic device controller unit system functions as a distributed processing environment.

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21.   (Original)   The system of Claim 19, wherein Universal Serial Bus is the default communication protocol used between the generic device controller unit system and the processor.

22.   (Original)   The system of Claim 19, wherein the generic device controller unit system is an input/output device interface for the processor to the peripheral devices.

23.   (Original)   The system of Claim 19, wherein the generic device controller unit system produces protocol and associated data translation without the higher level functionality of the processor.

24.   (Previously presented)   A method for providing a data and protocol communications interface to facilitate interaction between a processor of a non-true real time computer and any number of peripheral devices, the method comprising:

interfacing between said any number of peripheral devices the non-true real time computer having a non-true real time operating system and a non-true real time-enabled circuit board;

employing asynchronous true real time peripheral device control through a generic device controller unit, wherein the device controller allows the processor to implement true real time control of the peripheral devices without the non-true real time operating system requiring either a real time kernel or a layered true real time operating system; and

providing a protocol and associated data communications interface between the processor and the peripheral devices, thereby allowing the processor to utilize a single protocol and associated data to communicate with the peripheral devices which may utilize different protocols and associated data than that used by the processor.

25.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control while interfaced with a non-true real time operating system running standard non-true real time software.

26.   (Original)   The method of Claim 24, wherein the generic device controller unit functions as a distributed processing environment.

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27.   (Original)   The method of Claim 24, wherein the generic device controller unit further includes customized system drivers.

28.   (Original)   The method of Claim 24, wherein Universal Serial Bus is the default communication protocol between the generic device controller unit and a processor.

29.   (Original)   The method of Claim 24, wherein the generic device controller unit interfaces with a non-true real time operating system that functions in a Win32 environment.

30.   (Original)   The method of Claim 24, further comprising:

providing an input/output device interface from the processor to the peripheral devices.

31.   (Original)   The method of Claim 24, further comprising:

providing real time device control to resource management capabilities of a standard non-true real time operating system.

32.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control without the higher level functionality of the processor.

33.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control without the processor utilizing a true real time kernel.

34.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control without the non-true real time operating system being a layered true real time operating system.

35.   (New)   The system of Claim 1, wherein the facilitated interaction between the peripheral devices and the non-true real time computer comprise data transfers that are not bounded by length.

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36. (New) The system of Claim 12, wherein the facilitated interaction between the peripheral devices and the non-true real time computer comprise data transfers that are not bounded by length.

37. (New) The system of Claim 19, wherein the facilitated interaction between the peripheral devices and the non-true real time computer comprise data transfers that are not bounded by length.

38. (New) The method of Claim 24, wherein the facilitated interaction between the peripheral devices and the non-true real time computer comprise data transfers that are not bounded by length.